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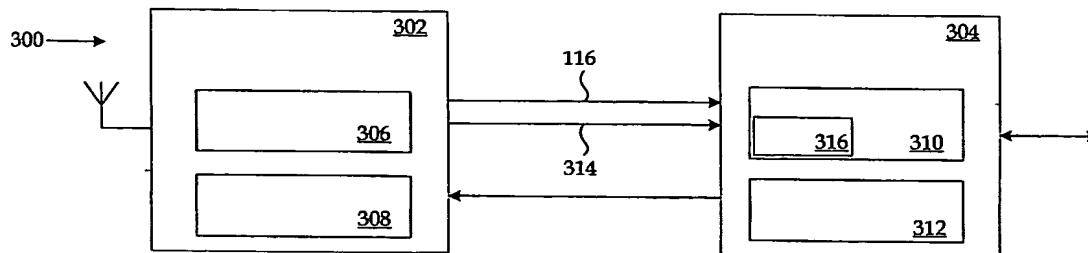
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR ENERGY EFFICIENT SIGNAL DETECTION IN A WIRELESS NETWORK DEVICE



(57) Abstract: An incoming signal, such as a data frame, is detected in a RF stage (302) of a wireless station (300). This allows the baseband stage (304) to be in a low power or off state until an incoming signal is detected. By detecting an incoming signal in the RF stage (302), the amount of power consumed by the baseband stage (304) is advantageously reduced. When an incoming signal is detected, the RF stage (302) generates an activation signal that is sent to the baseband stage (304) to activate the baseband stage (304). Once activated, the baseband stage (304) receives the signal and performs signal processing and data recovery operations.

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